

Daily GLOWBUGS

Digest: V1 #19

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

Subject: glowbugs V1 #19

glowbugs

Wednesday, April 30 1997

Volume 01 : Number 019

Date: Mon, 28 Apr 1997 23:50:10 -0700 (PDT)

From: Ken Gordon <keng@uidaho.edu>

Subject: Re: AN/GRC-109

> The only rocks I have are for 80M.

Your 80 meter rocks will work on 40, and 20, and 15 with the rig...PROVIDED they will still be in the band at the multiples. I.e. my 3510 rock gives me 7020, 14040, and 21080 also.

> Here is my address so you can send me a

> copy of the schematic:

>

> Charlie Dumar, KA2VCS

> P.O. Box 393

> Chazy, NY 12921

>

> Also throw in a note for Fair Radio Sales.

>

OK. I will get it off to you tomorrow. I'll throw in the schematics for the rx and powersupply too.

> The hardest thing for me to do was to homebrew a matching power connector.

Yes, that thing IS a bit weird. It is molded in rubber.

> Once I get things settled in I can let you know so we can get a sched going.

>

Sounds good to me!

Ken W7EKB

Date: Tue, 29 Apr 1997 00:13:22 -0700 (PDT)

From: Ken Gordon <keng@uidaho.edu>

Subject: Re: Reviving electrolytics...and tubes...too long(!)

>

> I am sure that at least ONE of the electrolytics is shot. The rig was
> fired up by the person I bought it from JUST before he shipped it to me.

> I would have rather done that myself! :-)

>

BTW, as I remember it, the procedure for re-forming electrolytics is to put a low DC voltage (about 10% of rated) on them for about a week. Is that correct?

Another note that some may find of interest here: Many years ago I read in an old electronics manual written for ship-board radio ops that one could generally "resurrect" completely flat power amp tubes using the following technique: Apply 2.5 times (!YES!) the normal filament voltage to them for 1 minute, drop the voltage to 1.5 times normal and cook for 1 hour. Supposedly, although this can work with any type of filament, it is only really supposed to be used on pure tungsten or (the best) thoriated tungsten filaments. What supposedly happens is that the more active

tungsten or thorium is "boiled to the surface" and then allowed to "set" there, reactivating the emissivity of the tube.

I tried this technique on a dozen 304TLs I was given by a University Chemistry department. The department had a Nuclear Magnetic Resonance machine which used 12 of them as series regulators. They were burnt so flat that the shadow of the spaces between the plate sections were burnt into the glass envelope. NONE of them would pull more than about 10 ma at 2500 volts, and most even complained about that.

Since I really didn't have anything to lose (they didn't work anyway), I tried the above technique and managed to save all of them. Some, of course, worked a little better than others, but they all were up to spec.

I used a filament transformer which was too small to carry the load, but dunked it into a bucket of distilled water. When the water started to boil, I waited a few minutes for it to cool before I started another tube run.

I also tried to position the tubes so that the filament wouldn't sag or short out. Seemed to work OK..

I used a pair of those tubes in a modified BC-610 I used as a linear amp to run 'phone patches for the guys in Vietnam. Those tubes lasted at least 4 years after I "reactivated" them. The BC-610 ran 3000 volts at 1 amp DC. on Air Force Mars frequencies just above the 20 meter band. I never could figure out PEP. I drove it with a modified SB-101 for SSB or a modified VF-1 driving a modified DX-35 for RTTY. Sure kept the shack warm, and the light from the 304s was pleasant. The plates ran a very pretty orange color.

The VF-1 was surprisingly stable, and the DX-35 with a crammed in TV power transformer (after I burnt out two of the factory transformers), never gave any trouble in 5 years of hard use.

After I got married, I gave most of it away. Sure wish I still had some of it...and a place to keep it.

Ah, Boat Anchors, what fun!!!

Date: Tue, 29 Apr 1997 09:54:43 -0400 (EDT)
From: leeboo@ct.net (Leon Wiltsey)
Subject: REGENS AGAIN

>To: BA
>From: leeboo@ct.net (Leon Wiltsey)
>Subject: REGENS AGAIN
>Cc:
>Bcc:
>X-Attachments:
>
>Hi Gang
>
>I KNOW I am on dangerous ground when I ask this question
>but here goes. Does anyone out there have any good info
>on the question of solid state detectors for regens ?
>What I am talking about is are they more sensitive than tubes.
>(given the proper circuits that is) I have been hearingf from most
>of my local buddies that solid state regens are far better than old
>tube circuits, but they are young fellows with not much good tube
>experience so I really dont know WHAT IS THE ANSWER.
>even though I butchered the TenTek kit I tried to put togeather
>I could manage a small circuit board det stage (as long as I
>did not have to jam all the parts close togeather as on the kit)
>Waiting to hear fom you all on this subject!!!!!! 73 73
>

Thank the good LORD for all that you have!!!

Leon B Wiltsey jr. (Lee)
4600 Lake Haven blvd...
Sebring fl 33872.....

68yr old retired semi disabled senior
(stroke got my balance and coordination)
formerly w4kcj & kp4ryb (till I quite) dumb dumb
waiting for my tech+ lic to arrv 73's
play keyboard and sing

music 1920's to 60'
none of the 80's- 90's noise

Date: Tue, 29 Apr 1997 09:59:18 -0500
From: John Michael <MICHAEL@ecs.umass.edu>
Subject: Re: Reviving electrolytics...

Ken Gordon <keng@uidaho.edu> wrote:

>BTW, as I remember it, the procedure for re-forming electrolytics is to
>put a low DC voltage (about 10% of rated) on them for about a week. Is
>that correct?

The important thing in reforming old electrolytics is to limit the current into them to less than 5 ma until the dielectric has reformed. They'll start out almost a dead short, draw a large current, heat up, and often explode if this is not done. You can limit the current any way you like: a resistor in your DC supply is fine. I have a DC supply with a variac on the AC line side, so I start with a low voltage (say 50 v or so) while monitoring the current. After a few minutes I can increase the voltage and maintain the same current, and I continue until the capacitor is carrying its full rated working voltage with a current drain of less than 1 ma.

John Michael michael@ecs.umass.edu

Date: Tue, 29 Apr 1997 07:21:13 -0700
From: "Paul F. Carreiro" <carreiro@barepower.net>
Subject: Re: Reviving electrolytics...

At 09:59 AM 4/29/97 -0500, John Michael wrote:
>The important thing in reforming old electrolytics is to limit the current
>into them to less than 5 ma until the dielectric has reformed. They'll
>start out almost a dead short, draw a large current, heat up, and often
>explode if this is not done. You can limit the current any way you like:
>a resistor in your DC supply is fine. I have a DC supply with a variac
>on the AC line side, so I start with a low voltage (say 50 v or so) while
>monitoring the current. After a few minutes I can increase the voltage
>and maintain the same current, and I continue until the capacitor is
>carrying its full rated working voltage with a current drain of less than
>1 ma.

When trying to reform a multisection can type electrolytic, do you perform this technique on all sections simultaneously (with all sections paralleled) or treat each section, one at a time?

Thanks and 73
Paul N6EV

Paul F. Carreiro - N6EV - ex-N6HCS - El Camino Village, CA
E-Mail: carreiro@barepower.net - <http://www.barepower.net/~carreiro/>
QRP - Boatanchors - Glowbugs - Mobile CW - QRQ +40WPM
NorCal QRP #367 - QRP QRCI #8885 - CW FISTS #1407 - QRP-L #236
Zuni Loop Mountain Expeditionary Force (QRP Field Day)

Date: Tue, 29 Apr 1997 10:54:48 -0400 (EDT)
From: rdkeys@csemail.cropski.ncsu.edu
Subject: Re: REGENS AGAIN

>>I KNOW I am on dangerous ground when I ask this question
>>but here goes. Does anyone out there have any good info
>>on the question of solid state detectors for regens ?
>>What I am talking about is are they more sensitive than tubes.
>>(given the proper circuits that is) I have been hearingf from most
>>of my local buddies that solid state regens are far better than old
>>tube circuits, but they are young fellows with not much good tube
>>experience so I really dont know WHAT IS THE ANSWER.
>>even though I butchered the TenTek kit I tried to put togeather
>>I could manage a small circuit board det stage (as long as I
>>did not have to jam all the parts close togeather as on the kit)
>>Waiting to hear fom you all on this subject!!!!!! 73 73

My guess it that your buddies have not been building proper tube circuits.

The detecting device really does not matter. The circuit is what matters. I can replace a triode with an FET anytime, and it works just fine, and vice/versa, at the plate voltages I run. Most of the time the FET's require less feedback to operate comparably to a tube. That probably means that the FET has a bit more gain, and thus may be a bit more sensitive. On HF, below about 12mhz, I find no real difference, between the two device types, except that tubes are always easier to control, in my circuits. Ambient noise levels override the sensitivity, practically, so there is no real difference at lower HF.

I have built several fet regens with ic op-amp audio stages. They work fine, generally, and are comparable to the tube circuits, but always tend to be a bit fussier to control. The ``ragged edge'' of regeneration, as I like to call it, is usually easy to set exactly with a tube. Conversely, with an FET, I usually have to swing back and forth with the regeneration control to get it to set ``right''. Also, the FET detectors tend to be much more prone to pulling than the tube detectors, even with loose coupling.

I have not had a chance to play with the Ten-Tec regen set, but may order one and see what it is all about. I would like to hear other's comments about it, and transistor regens in general. All my play has been with FET's and none with bipolars.

I did do a tube/FET sub in an SE-1420 receiver from WWI, and the FET was a bit more sensitive, and in that circuit with its broad ranges of controls that put most ham circuits to shame, it was fairly easy to control the FET on 500 khz. On the ham bands, none of my FET circuits have been that easy to control, right on the edge of oscillation, where best sensitivity and detection occurs.

That is all I have experience with, comparing tubes vs transistors in regens. In my hands they generally compare well, but those glowless things wat's lost their smoke, seem fussier most of the time.

73/ZUT DE NA4G/Bob UP

Date: Tue, 29 Apr 1997 09:46:58 -0700
From: Ray LaRue <raylarue@gte.net>
Subject: Re: Reviving electrolytics...

John Michael wrote:

>
> Ken Gordon <keng@uidaho.edu> wrote:
>
> >BTW, as I remember it, the procedure for re-forming electrolytics is
>
> > The important thing in reforming old electrolytics is to limit the current
> into them to less than 5 ma until the dielectric has reformed. They'll
> start out almost a dead short, draw a large current, heat up, and often
> explode if this is not done. You can limit the current any way you like:
> a resistor in your DC supply is fine. I have a DC supply with a variac
> on the AC line side, so I start with a low voltage (say 50 v or so) while
> monitoring the current. After a few minutes I can increase the voltage
> and maintain the same current, and I continue until the capacitor is
> carrying its full rated working voltage with a current drain of less than
> 1 ma.
>
> John Michael michael@ecs.umass.edu

John,
That's pretty good advice. I would only add, I use one of two methods. The Sencore LC 53 "Z Meter", cap-ind analyser, uses a curent limited pulsed DC. It can also check the leakage current in a cap, as you progress thru restoration. They list typical leakages for most caps.

In suspected difficult situations, I may use a current limiting supply to prevent catastrophic failure of the cap. Sencore notes in their manual for the LC53, page 19, suggest, (when using an external supply), limiting the current to less than 50 ma. Then raise the voltage up slowly, until you reach the rated voltage of the capacitor. Leave it there for at least an hour, to complete the reformation. I find that works fine. Most restorable caps will peak a little curent each time you raise the voltage, and then drop done to nothing. I just reformed the electrolytics in a KW amplifier that had been sitting for over 20 years, unused. All caps came back up fine.

Discharge the cap throughly (thru a bleeder resistor), and recheck the leakage, to see if further reforming is necessary. Remember to always unsolder at least one end of the cap, to isolate it from the circuit.

Any electrolytics that have been sitting on the shelf are suspect and would benefit from this procedure. You don't know how long a brand new one has been sitting either.

73,
Ray, W4BYG

Date: Tue, 29 Apr 1997 09:51:40 -0700
From: Ray LaRue <raylarue@gte.net>
Subject: Re: Reviving electrolytics...

Paul F. Carreiro wrote:

>
> When trying to reform a multisection can type electrolytic, do you perform this technique on all sections simultan
paralleled) or treat each section, one at a time?
>
> Thanks and 73
> Paul N6EV
>

Paul,
Do one section at a time and then also check for any leakage between the sections. Remember to isolate each section from the circuit as you test.
73,
Ray, W4BYG

Date: Tue, 29 Apr 1997 11:11:21 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Questions about Svetlana tubes?

>
> Bob what about a tube like the 10 or 10Y that would have similar characteristics
> as the 45 which is in so high a demand?? the tube would have enough power for
> both the audio types and as a MOPA or final. What do you think.
>
> Don
>

The '10, '10Y, 801, 801A, VT-25, etc, is the standard 7.5 watter. It would be great if someone would make that again, but I sense there may not be enough demand. Maybe a lowendian version of the Svetlana 811-3 or such would be roughly equivalent. I dunno about their tubes, yet, and am having a dickens of a time trying to get any info sheets on them.

The 7.5 watter is a great tube for Hartleys, audio amps, MOPA sets, and lots of neat OT gear, tho, and I am sure there are a lot of folks around that could use a dozen 801A's, if the price were reasonable.

I would like to see a generic 1 watter ('01A/30), a generic 10 watter (801A), and a generic 50 watter (211/811-3?) brought out by Svetlana, if possible. That would cover the required spectrum for most ham and audio usage, in all the standard applications that we would usually need. A common basing would do, for compatibility, and standardization, and standard 4 pin base, in a single-ended design, would be perfect.

I am probably dreaming, but what the heck, dream big, right?
Svetlana, are you listening.....(:+)}.....

73/ZUT DE NA4G/Bob UP

p.s. Anyone have a spec sheet on the Svetlana 811-3 and 811-10 single-ended triodes?

Date: Tue, 29 Apr 1997 11:29:22 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Early Regen Receiver Manuals coming on-line

Due to the graces of some of our brethren over the past several months, I have been able to obtain fairly complete and usable xeroxes of some of the early regen receiver manuals used in the Navy and commercial services. Slowly, but hopefully surely, I am getting them rekeyed and reprinted, for on-line distribution. Typoes, notwithstanding, the

first and last of the line are up for ascii copy, and the last of the line is finished typeset, with schematics. If anyone is interested in the ascii copies (no illustrations -- you have to find those or download them from the archives when they get all scanned in), send me email, or if most are interested, I can post them one a day, to the list, since they are only about 5-7 pages long. These manuals make great reading for proper operation of regen receivers, as was done professionally, in the early days. Most modern regen articles have long since forgotten the early tricks and procedures for properly operating regen receivers, and one can learn a lot by reading carefully, the old manuals, especially on matters of coupling, proper tuning, etc. So, if anyone is interested, the first two of hopefully 7 manuals are up for ascii distribution. Send me an email if you are interested in me sending you a copy. If more than 50 are, then I will just post it to the list (with the listowner's permission).

73/ZUT DE NA4G/Bob UP

Date: Tue, 29 Apr 1997 11:38:56 -0500 (CDT)
From: Chris Broadbent <cfb@bga.com>
Subject: Re: Questions about Svetlana tubes?

> ...<SNIP>

> would be roughly equivalent. I dunno about their tubes, yet, and am
> having a dickens of a time trying to get any info sheets on them.

>
> ...<SNIP>

>
> 73/ZUT DE NA4G/Bob UP

>
> p.s. Anyone have a spec sheet on the Svetlana 811-3 and 811-10 single-ended
> triodes?

>
>

Bob, et al,

Svetlana has a website on which they carry all the data on their tubes, including the plate characteristic curves - you do need an Adobe acrobat attachment to look at said graphs. Their page is:

www.svetlana.com

- --

Cheers,

Chris F. Broadbent (KC5VQL)

Date: Tue, 29 Apr 1997 10:46:38 -0700
From: dfrancis@iex.net (Dexter Francis)
Subject: Military Gear available

Greetings -

I've recently saved a number of military BA items from the scrap man. These are really cosmetic dogs with hearts of gold, so I've probably been pessimistic in describing their condition. (My idea of a 10 is New in the Box.) I've really have tried to be as objective in the descriptions as possible.

I am going to sell these on a "sealed bid" basis. I'm not looking to start an open auction. My idea of fair and reasonable pricing is what feels *comfortable to the buyer* given the best information they have available. I'm mostly looking to relocate this stuff to loving homes rather than seeing them end up in next year's Hyundai's.

There are a couple more items that I'll post later, which were too grimy to not clean up first.

I'll answer questions and take bids until 5 pm friday (MDT) and announce the lucky winners NEXT Tuesday. (May 6th, 1997)

You pay shipping by whatever method you prefer.

And now, our candidates:

Signal Corps U.S. Army Transmitter Tuning Unit TU-3-B
Frequency Range 400-800 KC
Serial No. 5474 Order 700-NY-41 September 10, 1940
Manufactured By General Electric Co., USA

Cosmetically about a 6. Minor paint deterioration on front panel.
Service/Repair mark slightly visible on front panel.
Most of the blacking and lettering TGG is gone on the Main Oscillator
Tuning Dial.
All lettering is gone on the skirt of the P.A. Tuning Dial.
All knobs are original. Name Plate is intact and readable.
Both handles are in place and straight.
All 4 retaining clips are in place and straight.
Calibration chart is missing, frame is in place and unbent.
Enclosure is crinkle black finish with chrome rail strips.
M.O. Tuning control is tight and difficult to turn.
P.A. Tuning knob is free and easy to turn, lettering is readable.
Antenna Coupling switch is easy to turn and has strong detents, lettering
is readable.
Band Pass switches is easy to turn and has strong detents, lettering is readable.
Weight: 10 lbs.

Signal Corps U.S. Army Transmitter Tuning Unit TU-7-B
Frequency Range 4500-6200 KC
Serial No. unreadable
Manufactured By General Electric Co., USA

Cosmetically about a 2. Major paint deterioration on front panel.
All of the blacking and lettering is gone on the Main Oscillator Tuning Dial.
All lettering is gone on the skirt of the P.A. Tuning Dial.
All knobs are original. Name Plate is intact and readable.
Both handles are in place and straight.
All 4 retaining clips are in place and straight.
Front panel has slight bend in lower left corner.
Calibration chart is included but water damaged, frame is in place and
slightly bent.
Enclosure is unpainted aluminum.
M.O. Tuning control is tight and but turns thru entire range of travel.
P.A. Tuning knob is free and easy to turn.
Antenna Coupling switch is easy to turn and has strong detents.
Weight: 10 lbs.

Signal Corps U.S. Army Transmitter Tuning Unit TU-8-B
Frequency Range 6200-7700 KC
Serial No. unreadable
Manufactured By General Electric Co., USA

Cosmetically about a 3. Major paint deterioration on front panel.
All of the blacking and lettering is gone on the Main Oscillator Tuning Dial.
All lettering is gone on the skirt of the P.A. Tuning Dial.
All knobs are original. Name Plate is intact and readable.
Both handles are in place and straight.
All 4 retaining clips are in place and straight.
Front panel has slight bend in upper right corner.
Calibration chart is missing, frame is in place and slightly bent.
Enclosure is unpainted aluminum.
M.O. Tuning control is easy thru entire range of travel.
P.A. Tuning knob is free and easy to turn.
Antenna Coupling switch is easy to turn and has strong detents, lettering
is readable.
Weight: 10 lbs.

Signal Corps U.S. Army Transmitter Tuning Unit TU-26-B
Frequency Range 200-500 KC
Serial No. 3795 Order 6414-NY-41 June 30, 1940
Manufactured By General Electric Co., USA

Cosmetically about a 6. Minor paint deterioration on front panel
Service/Repair mark clearly visible on front panel.
Most of the blacking and lettering is gone on the Main Oscillator Tuning Dial
All lettering is gone on the skirt of the P.A. Tuning Dial.
All knobs are original. Name Plate is intact and readable.
Both handles are in place and straight
All 4 retaining clips are in place and straight
Calibration chart is in place, but water damaged, frame is in place and unbent
Enclosure is crinkle black finish with chrome rail strips
Paint is badly damaged on one side and back panels.
Moderate bend/gash in upper right corner of front panel

M.O. Tuning control is tight and difficult to turn.
P.A. Tuning knob is free and easy to turn, lettering is readable
Antenna Coupling switch is easy to turn and has strong detents, lettering
is readable.
Band Pass switches is easy to turn and has strong detents, lettering is readable.
Weight: 10 lbs.

CS-49 Enclosure for any of the above. (1 available)
Cosmetically about a 6. Slight scratches and chips on all faces.
Minor dent on right rear edge
All 4 clip posts are in place and slightly rusted.
6 small non-original pierce marks on rear face. (reparable)
Weight: 3 lbs

RT-7/APN-1 Radar Altimeter Tranceiver (420 MHz)
NXsa-22419 15136:CQC
Cosmetically about a 7. Minor paint damage to front panel
All lettering readable, all placards in place.
All connectors and knobs are original and in place.
Dynamotor and all tubes in place.
Dynamotor: A.G. Redmond Model 5047 - Input 27 V 1.75A, Output 285V .075 Amps
Tube compliment: 12SJ7(2), 12SH7(4), 12H6(2), 3825(1)
Autopilot dummy plug in place
Weight: 17 lbs.

RT-7/APN-1 Radar Altimeter Tranceiver (420 MHz)
NXsa-22419 6286:CQC
Cosmetically about a 4. Major paint damage to half of front panel.
Some lettering un-readable, all placards in place.
All connectors and knobs are original and in place.
Dynamotor and all but one tube in place. (3825 is missing)
Dynamotor: A.G. Redmond Model 5047 - Input 27 V 1.75A, Output 285V .075 Amps
Tube compliment: 12SJ7(2), 12SH7(4), 12H6(2).
Autopilot dummy plug missing.
Spare fuse cap is missing.
Weight: 17 lbs.

RT-18/ARC-1 Tranceiver

Cosmetically about a 5, tuning unit bezel is missing.
Paint on top side and rear has minor nicks scrapes and dings.
No obvious corrosion inside or out. (Dusty, not crusty)
All tubes are in place.
Unit previously modified to operate off 115 VAC by the addition of
a line transformer in the dynamotor bay.
No crystals
All front panel switches are in place and original
Rear panel power connector is missing.
Weight: 43 lbs.

Pincor Dynamotor Model VS-25. S.N. 3266
Pioneer Gen-e-motor

Input	Duty	Output
6V 21A	Continuous	500V 0.16A
12V 11A	Continuous	500V 0.16A

Cosmetically about a 5. minor dent on both end caps.
Brushes are in place. Armature spins freely.
Commutators are not badly worn.
Weight: 25 lbs.

Bendix Dynamotor Model DA-3A. S.N. W-172412
Mfg. by Webster for Bendix Radio

Input	Duty	Output 1	Output 2	Output 3
28V/10.5 A	Continuous	300 VDC/0.260 A	150 VDC/.010 A	14.5 VDC/5.0 A

Cosmetically about a 4.
Large dent on one end cap
Insulation on wires is cracked.
Brushes are in place.
Unit needs a complete tear-down and cleaning, but appears restorable.
Weight: 20 lbs

Dynamotor Unit PE-73-C & GE Dynamotor Model 5D48B9A Type D Frame 48

Input Output
28 V/19 A 1000V/0.35A

Unit is cosmetically about a 7. Minor scratches on paint.
Minor dent on one end cap.
Aluminum Baseplate is corroded but mounting flange is good.
Fuses and contactor look very good. No damage or corrosion.
Spare fuse link and allen wrench in place under top cover.
Weight: 39 lbs

Dynamotor Unit Type 41 S.N. 3922
Mfg by ElecroLux

Mounted on Signal Corps US Army Case CS-80-A
Top Cover is missing.
Includes 2 Filter units, solenoid and shock mounts

Input Output 1 Output 2
14 V /20 A 150 VDC 10 ma. 300 VDC/260 ma.
13.8V/4.9A

Unit is cosmetically about a 5. Scratches on paint.
Weight: 50 lbs

Type CKB-20104A Rectifier Power Unit
A unit of Model LM-15 Radio Equipment
Mfg. Mission Bell Radio Mfg. Co. Inc.
for the Navy Department Bureau of Ships

Input Output
105 - 125 VAC 13V 0.6 Amps AC and 290 V 20 ma. DC

Unit is cosmetically a 8, minor damage to paint.
Includes shock mount.

Interior has slight corrosion.
Type 84 tube is in place.

Unit should clean up nicely.
Weight 14 lbs

ARC-5 VHF Receiver (2)
Both units cosmetically a 5
Minor (reparable) dents on exterior panels
All covers in place
All tubes in place
Weight: 14 lbs

ART-13B Transmitter
W/Comco Crystal Oscillator Unit

Cosmetically a 4
No tubes
Missing PA Plate Voltage meter.
Missing back cover.

Outside Looks ratty.
Inside is pretty clean.
All knobs in place
Coarse tuning knob is damaged

Either a great parts unit or a candidate for a complete tear-down restoration
Weight: 65 lbs.

BC 230/430 Coil sets:

All in roughly the same condition, except C-384 which has a cracked
phenolic plate.
These should clean up nicely and be perfectly useable.

C274 - Covers 5000 - 6210 kc
C384 - Covers 5000 - 6210 kc
C401 - Covers 2500 - 6210 kc
C404 - Covers 5000 - 6210 kc

- -df

* For a listing of tubes and related parts try: *
* http://www.usa.net/~dfrancis/CWest_Tube_Sales.html *

Date: Tue, 29 Apr 1997 13:00:23 -0400 (EDT)
From: SVETENGR@aol.com
Subject: Re: Questions about Svetlana tubes?

Sir:

Here are some answers to your requests about Svetlana tubes. Please feel free to forward this to the Glowbugs mailing list and other related lists.

For "antique triode" looks, the SV811-10 or SV572-10 would be useful for either an oscillator or a power amp. The SV-series triodes are derived from 811A and 572B, respectively, minus the plate cap----they are intended for high-end audio amplifiers, where a plate cap would be an electrocution hazard. The SV811-10 has a μ of 10, rated dissipation of 65 watts (it can handle more with color on the plates) and maximum plate voltage of 800v due to the plate connection on the base. This is a very conservative tube, with internal capacitances similar to the regular 811A. The SV811-10 would be suitable for homebrew RF equipment, although I have yet to see anyone using it for something other than audio. It looks like a 1930s triode, with a large shoulder-type glass envelope and white ceramic base. It's a pretty tube, intended to look good in high-end amplifiers. Retail price is \$30, while our regular 811A is \$20.

The SV572-10 is a uprated version of the SV811-10. The 572 types are plug-in replacements for the 811 types, except for a much greater plate dissipation and a cylindrical glass envelope. The SV572-10 has a graphite plate with plate dissipation of 125 watts and maximum plate voltage of 1000v. Otherwise, it is an exact replacement for the SV811-10. The Sv572s look like the old Sylvania 210 or a miniature 211. The SV572s also come with a μ of 30 (similar to 812A) and 160 (just a regular 572B without plate cap).

Both the SV811s and SV572s also come with a μ of 3. This is an insensitive tube, intended for low-distortion audio use in Class A1 service with no feedback. It's probably not as easy to use in RF as the -10 version, due to a high drive voltage requirement.

All the above triodes have the same filament as our 811A---6.3v at 4 amps. They all have roughly the same grid-plate capacitance of 8 pF. The SV811-10 or SV572-10 would be usable in any circuit intended for 211s or 10s, just change the filament power and (in a 211 circuit) the socket.

The advantage of these over old 10s or 211s is that the SV triodes are being manufactured and are easy to get....there is a Chinese 211, which many people don't know about; the 10 is out of production and becoming valuable due to its use by wealthy audiophiles in Asia. It would be safer to use SV811s or SV572s, simply due to the supply situation. Class C ratings aren't available, though you can probably deduce such ratings as being similar to the 811A and 572B while observing the plate-voltage maximum ratings.

As far as other glass tubes, Svetlana has a relatively small product line at this time. We don't make a medium- μ triode like a 30 or 6J5 yet. Below are the other glass tubes in the line.

6AS7G (low- μ dual triode for power supply regulators, octal base)
6BM8 (high- μ triode and 7-watt power pentode in 9-pin mini envelope)
EL34 (popular power pentode, 25 watts, octal base)
SV6550C (popular beam-power tube, octal base)
SV6L6GC (popular beam-power tube, octal base, newly introduced)
EF86 (small low-noise audio pentode, built-in shield, 9-pin mini envelope)
EL509 (35-watt beam power "TV sweep" tube, magnoval base)
These types have a major advantage over "NOS" tube types--these are currently being manufactured in Russia. Folks who have sweep-tube linear amps or transmitters are having difficulty finding old American-type sweep tubes; the EL509 is suitable for retrofit into any equipment that has enough space for it.

We presently also have 811A, 572B, and 833A. Other tube types are planned for future introduction. If anyone has further questions or would like data sheets about these tubes, please contact us at (415) 233-0429 or email to svetengr@aol.com. Please include your mailing address. If you have a web browser, our web page at www.svetlana.com has all our current tube data sheets in Adobe Acrobat form, downloadable 24 hours a day, along with some audio application notes and other information. If anyone does use our audio tubes for RF, please let us know.

Eric Barbour
Svetlana Electron Devices

Date: Tue, 29 Apr 1997 21:28:53 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: BA Frequency Measuring Contest using BC-221 only!

At 07:33 PM 4/29/97 +0000, you wrote:

>
>I saw that one person said they would be glad to be the transmitting
>source for the "BC-221 freq test". I will also volunteer as I am centrally
>located and can crank out the legal limit on 80 thru 10 meters, and 100
>watts on 160. My standard is traceable to WWVB and guaranteed to be at
>least 5 parts in 10-10.

>
>
>E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
>CIS: Data / Telecom Aurora University, Aurora, IL
>630-844-4898 Fax 630-844-5530
>

>That's not necessary! The FMT's usually took place on only 80, 40 and 20 meters.

I don't recall ever them being on 160 or 15 or 10. Usually 5 minutes was allocated as the "active" period for each band, although W1AW or W6OWP would transmit simultaneously on all bands. I'd suggest if three bands were used at a single transmitter site, that the same 5 minute "window" would prevail, but the transmitter would be active before the "window" for at least 5 minutes. If we allow an active "window" at 15 minute intervals, this would allow the Transmitter to be QSYed and tuned on the "new" frequency. In other words, a waiting period of up to 5 minutes while the transmitter is bandswitched and tuned, a 5 minute period of transmission for the contestants to get setup, and a further 5 minute transmission "window" where the measurements are actually made by the contestants and the "umpire".

W1AW usually would send :QST QST QST DE W1AW W1AW W1AW (15 second dash) Maybe whoever does this one can send FMT FMT FMT DE K9EUI K9EUI K9EUI (15 second dash) then repeated. Or perhaps the 15 second dash can be repeated say 4 times then FMT DE K9EUI (repeat sequence until 5 minutes expires.) It would be helpful if the transmitting station has some kind of autokeyer if the same station is being "counted" by an umpire on-site. If sent by hand via a keyer, it would surely take two persons: an operator and an "umpire" doing the measurements and recording the frequency and times.

It might be lots of fun and bring back some "lost skills"! What say ye BA/GB bunch?

73

E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net

Looking for: 860 tubes, WL-460 tubes

Butternut HF2V antenna, G-R test gear***

Date: Tue, 29 Apr 1997 16:07:19 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: BA Frequency Measuring Contest using BC-221 only!

This looks like loads of fun. Sure wish I still had my old BC-221.

Good luck, all.

Kenneth G. Gordon W7EKB College of Mines and Earth Resources
226 N. Washington St. //or// University of Idaho
Moscow, Idaho 83843 Moscow, Idaho 83844
(208)-882-8745 (208)-885-6133
Great Highland Pipes, Amateur Radio, Electronic Consulting, Home-Schooling
Traditional Roman Catholic

My PGP Public Key Upon Request.

Date: Tue, 29 Apr 1997 19:08:46 -0400
From: John Levreault <jlevro@shore.net>
Subject: Re: Questions about Svetlana tubes?

At 11:11 AM 4/29/97 -0400, rdkeys@csemail.cropsci.ncsu.edu wrote:
>p.s. Anyone have a spec sheet on the Svetlana 811-3 and 811-10 single-ended
> triodes?
>
>
>

Try www.svetlana.com. They have all the data sheets available in Adobe Acrobat format.

73 de NB1I
John Levreault

Date: Tue, 29 Apr 1997 19:27:56 -0600
From: Doug <doug@sunrise.alpinet.net>
Subject: Lucky find...for once

Hi Glowbuggers...just wanted to comment on the value of "swap meets" put on by our local ham clubs all over the country. Last weekend, the Billings, MT club had it's annual meet in the big city. Tables were set up with all manner of goodies from recent times and those long past. I lucked out and got a brand new in the box National Radio SBH vernier dial, complete with the installation hardware and the drilling template. Just, I would assume as it was sold back in the mid-50's... also, a couple coax relays and a much needed 813 (yes, my fingers are crossed) for the ART-13 restoration project.

So, it just goes to show us...the goodies are still out there...all ya gotta do is go after them.

Just a note...every July here in MT, we have the Glacier/Waterton International Hamfest held at Glacier Park. This is THE social event of the year in the high country, drawing hams and swap items from all over the area, along with the substantial contingent from Canada. Many, many sales off the back of pickups and tables...lots of neat old stuff and more recent pieces too. If you happen to be vacationing in the area, it's a worth while use of your time.

73

Doug, K7YD
Livingston, MT

Date: Tue, 29 Apr 1997 21:57:03 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Choke coils for sale

I have several (6)
Teletype Corp
reactor coils / Choke coils

6703005 - 101 - 943
Measure 0.410 Henry
Wire size is aprox # 1* awg so
should be good for about 5 amps cont.
AC hipot tested @ 3000VAC
Shipping would be around
\$12.00 CDN Via parcel post to CONUS
a bit cheaper to CDN Address

Would like to sell them for 5.00 each
Plus shipping costs
but am open to offers

Reply via email
to
ve6nap@oanet.com

End of glowbugs V1 #19

%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

[AB4EL Ham Radio Homepage @ SunSITE](#)

Created by **Steve Modena, AB4EL**
Comments and suggestions to **modena@SunSITE.unc.edu**
